



CERTIFICATE OF MAILING

Igw

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an Envelope addressed to: Mail Stop Disclosure Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

Date: 8-30-2006

By: Winsome A. St. Rose
Winsome A. St. Rose

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

Stefan Schorling

SERIAL No.: 10/587,386

INTERNATIONAL FILING DATE: FEBRUARY, 8, 2005

FOR: **NEW PRIMERS AND PROBES FOR
THE DETECTION OF PARVOVIRUS
B19**

)

) EXAMINER: Unassigned

) ART UNIT: Unassigned

) Confirmation No. N/A

) DOCKET NO: 22398-US

INFORMATION DISCLOSURE STATEMENT

Mail Stop Disclosure
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant submits herewith a Form-1449, in compliance with the duty of disclosure requirements of 37 C.F.R. §1.56, 1.97 and 1.98, listing accompanying documents that may be considered material to the examination of this application. This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits, whichever event occurs last. No certification or fee is therefore required under 37 C.F.R. § 1.97(b). However, should the Commissioner determine that fees are due in order for the Information Disclosure Statement to be considered at this stage, the Commissioner is hereby authorized to charge any fee deficiency, or credit any overpayment, to Deposit Account No. 50-0812.

This Information Disclosure Statement is not to be construed as a representation that: (i) a search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

Consideration of the cited documents and making the same of record in the prosecution of the above-identified application is respectfully requested.

Respectfully submitted,

Date: 3/29/06


Charles M. Doyle (39,175)

Correspondence Address:
Roche Molecular Systems, Inc
1145 Atlantic Avenue
Alameda, CA 94501
Tele: (510) 814-2800
Fax: (510) 814-2973

U.S. Department of Commerce Patent and Trademark Office

Atty. Docket No. 22398-US

Serial No. 10/587.386

LIST OF INFORMATION CITED BY APPLICANT

Applicant: Stefan Schorling

(Use several sheets if necessary)

International Filing Date: February 5, 2005

Group: N/A

SEP 05 2006

U.S. PATENT DOCUMENTS

	DOCUMENT NUMBER	ISSUE DATE	NAME	CLASS	SUBCLASS	FILING DATE
1	4,458,066	07/03/84	Caruthers, et al.	536	27	03/24/81
2	4,996,143	02/26/91	Heller, et al.	435	6	04/13/90
3	5,130,238	07/14/92	Malek, et al.	435	91	08/23/89
4	5,210,015	05/11/93	Gelfand, et al.	435	6	08/06/90
5	5,386,024	01/31/95	Kacian, et al.	536	25.4	02/10/93
6	5,478,972	12/26/95	Mizutani, et al.	174	250	08/25/94
7	5,487,972	01/30/96	Gelfand, et al.	435	6	01/05/93
8	5,565,322	10/15/96	Heller, M	435	6	11/6/92
9	5,585,254	12/17/96	Maxwell, et al.	435	172.3	04/02/93
10	5,804,375	09/08/98	Gelfand, et al.	435	6	04/25/95
11	5,346,034	10/15/96	Heller, M	435	6	08/23/96
12	6,103,476	08/15/00	Tyagi, et al.	435	6	03/15/99
13	6,162,603	12/19/00	Heller, M	435	6	07/28/98
14	6,174,670 B1	01/16/01	Wittwer, et al.	435	6	06/04/97
15	6,183,999 B1	02/06/01	Weimer, et al.	435	91.2	11/24/98
16	6,268,349 B1	07/31/01	Hirschman, S	514	44	04/15/97
17	6,274,307 B1	08/14/01	Soutschek, et al.	435	5	05/15/97
18	6,395,472 B1	05/28/02	Leary, et al.	435	5	02/05/99

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
19	PCT/EP2005/001243 Search Report	05/31/05	PCT				
20	37 24442 A1	02/02/89	DE				
21	37 34442 A1	04/27/89	DE				
22	0 238 893 B1	03/02/87	EP				
23	0 439 182 B1	01/25/91	EP				
24	04 - 88985	03/23/92	JP				X
25	11 - 221099	08/17/99	JP				X

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.T./

27	WO 91/04330	04/04/91	PCT				
28	WO 91/12079	08/22/91	PCT				
29	WO 92/02208	05/29/92	PCT				
30	WO 96/09391	03/28/96	PCT				
31	WO 96/41811	12/27/96	PCT				
32	WO 98/04730	02/05/98	PCT				
33	WO 99/16781	04/08/99	PCT				
34	WO 99/28439	06/10/99	PCT				
35	WO 00/24917	05/04/00	PCT				
36	WO 01/06019 A2	01/25/01	PCT				
37	WO 01/14593 A2	03/01/01	PCT				
38	WO 01/37291 A1	05/25/01	PCT				
39	WO 02/00924 A2	01/03/02	PCT				
40	WO 03/002753 A2	01/09/03	PCT				
41	WO 2005/075686 A1	08/18/05	PCT				
42	2 146 372 C1	10/03/00	RU				

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

43	Abramson, R., et al., 1993, "Nucleic acid amplification technologies", <i>Analytical Biotechnology</i> , 4:41-47
44	Alderton, R., et al., 1992, "Magnetic Bead Purification of M13 DNA Sequencing Templates", <i>Analytical Biotechnology</i> , 201:166-169
45	Anderson, M., et al., "Letters to the Editor: Human Parvovirus, The Cause of Erythema Infectiosum (Fifth Disease)?", <i>The Lancet</i> , June 18, 1983, p. 1378
46	Astell, C., et al., 1987, "Structural and Functional Homology of Parvovirus and Papovavirus Polypeptides", <i>J.gen.Virol.</i> , 68: 885-893
47	Aubin, J., et al., 2000, "Large-Scale Screening for Human Parvovirus B19 DNA γ PCR: Application to the Quality Control of Plasma for Fractionation", <i>Vox Sang.</i> , 78:7-12
48	Ausubel, F., et al., 2000, "Current Protocols in Molecular Biology", Supplement 55, 1:1-11
49	Barany, F., 1991, "The Ligase Chain Reaction in a PCR World", <i>PCR Methods and Applications</i> , 1:5-16
50	Barany, F., 1991, "Genetic disease detection and DNA amplification using cloned thermostable ligase", <i>Proc. Natl. Acad Sci.</i> , 88:189-193
51	Beaucage, S., et al., 1981, "Deoxynucleoside Phosphoramidites - A New Class of Key Intermediates for Deoxypolynucleotide Synthesis", <i>Tetrahedron Letters</i> , 22(20):1859-1862
52	Boom, R., et al., 1990, "Rapid and Simple Method for Purification of Nucleic Acids", <i>Journal of Clinical Microbiology</i> , 28(3):495-503

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.T./

53	Brown, E., et al., 1979, "Chemical Synthesis and Cloning of a Tyrosine tRNA Gene" <i>Methods in Enzymology</i> , 68 (8):109-151
54	Brown, K., 2000, "Haematological Consequences of Parvovirus B19 Infection", <i>Bailliere's Clinical Haematology</i> , 13 (2):245-259
55	Carriere, C., et al., 1993, "Rapid and sensitive method for the detection of B19 virus DNA using the polymerase chain reaction with nested primers", <i>Journal of Virological Methods</i> , 44 :221-234
56	Cohen, B., 1995, "Parvovirus B19: an expanding spectrum of disease", <i>BMJ</i> , 311 :1549-1552
57	Cotmore, S., et al., 1986, "Identification of the major Structural and nonstructural Proteins Encoded by Human Parvovirus B19 and mapping of Their genes by Procaryotic Expression of Isolated Genomic Fragments", <i>Journal of Virology</i> , 60 (2):548-557
58	Cubie, H., et al., 1995, "Dot-blot hybridization assay for detection of parvovirus B19 infections using synthetic oligonucleotides", <i>Molecular and Cellular Probes</i> , 9 :59-66
59	Dorsch, S., et al., 2001, "The VP1-unique region of parvovirus B19: amino acid variability and antigenic stability", <i>Journal of General Virology</i> , 82 :191-199
60	Düx, S., et al., 2002, "Parvovirus B19 Myocarditis in a young man with Previous non-bacterial meningitis", <i>Dtsch Med Wochenschr</i> , 127 :1584-1588
61	Enders, G., et al., 1998, "Life-Threatening Parvovirus B19-Associated Myocarditis and Cardiac Transplantation as Possible Therapy: Two Case Reports", <i>Clinical Infectious Diseases</i> , 26 :355-358
62	Enders, G., "Viral Infections of the Fetus Neonate, other than Rubella", Topley & Wilson's Microbiology and Microbial Infections, 9th Ed., by Collier, L., et al., Arnold Publishers 1998, pp 873-915
63	Erdman, D., et al., 1996, "Genetic diversity of human parvovirus B19: sequence analysis of the VP1/VP2 gene from multiple isolates", <i>Journal of General Virology</i> , 77 :2767-2774
64	Garegg, P., et al., 1985, "Formation of Internucleotidic Bonds via Phosphonate Intermediates", <i>Chemica Scripta</i> , 25 :280-282
65	Gruber, F., et al., 2001, "Quantitation of Viral DNA by Real-Time PCR Applying Duplex Amplification, Internal Standardization, and Two-Color Fluorescence Detection", <i>Applied and Environmental Microbiology</i> , 67 (6):2837-2839
66	Guatelli, J., et al., 1990, "Isothermal, <i>in vitro</i> amplification of nucleic acids by a multienzyme reaction modeled after retroviral replication", <i>Proc. Natl. Acad. Sci. USA</i> , 87 :1874-1878
67	Harder, T., et al., 2001, "New LightCycler PCR for Rapid and Sensitive Quantification of Parvovirus B19 DNA Guides Therapeutic Decision-Making in Relapsing Infections", <i>Journal of Clinical Microbiology</i> , 39 (12): 4413-4419
68	Hemauer, A., 1996, "Sequence variability among different parvovirus B19 isolates", <i>Journal of General Virology</i> 77 :1781-1785
69	Hicks, K., 1996, "Sequence analysis of a parvovirus B19 isolate and baculovirus expression of the non-structural protein", <i>Archives Virology</i> , 141 :1319-1327
70	Holloway, B., 1993, "An exonuclease-amplification coupled capture technique improves detection of PCR product", <i>Nucleic Acids Research</i> , 21 (16):3905-3906
71	Jakobi, R., 1988, "Filter-Supported Preparation of A Phage DNA", <i>Analytical Biochemistry</i> 175 :196-201
72	Jordan, J., 1996, "Exonuclease-released Fluorescence Detection of Human Parvovirus B19

	DNA, <i>Molecular Diagnosis</i> , 1(4) :321-328
73	Junkind, D., 2001, "Automation of laboratory testing for infectious diseases using the polymerase chain reaction - our past, our present, our future", <i>Journal of Clinical Virology</i> , 20 :1-6
74	Kwoh, D., 1989, "Transcription-based amplification system and detection of amplified human immunodeficiency virus type 1 with a bead-based sandwich hybridization format", <i>Proc. Natl. Acad. Sci. USA</i> , 86 :1173-1177
75	Marko, M., 1982, "A Procedure for the Large-Scale Isolation of Highly Purified Plasmid DNA Using Alkaline Extraction and Binding to Glass Powder", <i>Analytical Biochemistry</i> , 121 :382-387
76	Müller, J., et al., 2002, "Development and Validation of a Real-Time PCR Assay for Routine testing of Blood Donations for Parvovirus B19 DNA", <i>Infus Ther Transfus Med</i> , 29 :254-258
77	Narang, S., et al., 1979, "Improved Phosphotriester Method for the Synthesis of Gene Fragments", <i>Methods in Enzymology</i> , 68(6) :90-98
78	Nguyen, Q., et al., 2002, "Identification and Characterization of a Second Novel Human Erythrovirus Variant, A6", <i>Virology</i> , 301 :374-380
79	Ozawa, K., et al., 1988, "Functional Mapping of the Genome of the B19 (Human) Parvovirus by In Vitro Translation after Negative Hybrid Selection", <i>Journal of Virology</i> , 62(7) :2508-2511
80	Pattison, J., et al., 1981, "Parvovirus Infections and Hypoplastic Crisis in Sickle-Cell Anaemia", <i>The Lancet</i> , March 21, 1998, pp 664-665
81	Sambrook, J., et al., 1989, "Molecular Cloning A Laboratory Manual", CSH, 2 nd Edition. Cold Spring Harbor Laboratory Press.
82	Sato, K., et al., 2000, "Development of a Hypersensitive Detection Method for Human Parvovirus B19 DNA", <i>Journal of Clinical Microbiology</i> , 38(3) :1241-1243
83	Schmidt, J., et al., 2001, "Parvovirus B19 DNA in plasma pools and plasma derivatives", <i>Vox Sanguinis</i> , 81 :228-235
84	Schorling, S., et al., 2004, "Quantification of Parvovirus B19 DNA using COBAS AmpliPrep Automated Sample Preparation and LightCycler real-Time PCR", <i>Journal of Molecular Diagnostics</i> , 6(1) :37-41
85	Servant, A., et al., 2002, "Genetic Diversity within Human Erythroviruses: Identification of Three Genotypes", <i>Journal of Virology</i> , 76(18) :9124-9134
86	Shade, R., et al., 1986, "Nucleotide Sequence and Genome Organization of Human Parvovirus B19 Isolated from the Serum of a Child during Aplastic Crisis", <i>Journal of Virology</i> , 58(3) :921-936
87	Stelzl, E., et al., 2002, "Evaluation of an Automated Sample Preparation Protocol for Quantitative Detection of Hepatitis C Virus RNA", <i>Journal of Clinical Microbiology</i> , 40(4) :1447-1450
88	Takahashi, N., et al., 1999, "Genetic heterogeneity of the immunogenic viral capsid protein region of human parvovirus B19 isolates obtained from an outbreak in a pediatric ward", <i>FEBS Letters</i> , 450 :289-293
89	Turton, J., et al., 1990, "Similarities in nucleotide sequence between serum and faecal human parvovirus DNA", <i>Epidemiol. Infect.</i> , 105 :197-201
90	Uhlmann, E., et al., 1990, "Antisense Oligonucleotides: A New Therapeutic Principle", <i>Chemical Reviews</i> , 90(4) :544-584
91	Umene, K., et al., 1995, "A new genome type of human parvovirus B19 present in sera of patients with encephalopathy", <i>Journal of General Virology</i> , 76 :2645-2651

	92	Vassias, I., et al., 1993, "An in situ hybridization technique for the study of B19 human parvovirus replication in bone marrow cell cultures", <i>Journal of Virological Methods</i> , 44 :329-338
	93	Verma, S., et al., 1998, "Modified Oligonucleotides: Synthesis and Strategy for Users", <i>Annu. Rev. Biochem.</i> , 67 :99-134
	94	Vogelstein, B., et al., 1979, "Preparative and analytical purification of DNA from agarose", <i>Proc. Natl. Acad. Sci. USA</i> , 76 (2):615-619
	95	Walsh, C., "Acyl Transfers to Water: Endopeptidases and Exopeptidases", <i>Enzymatic Reaction Mechanisms</i> , W.H. Freeman and Company San Francisco, Ch. 3 53-107
	96	Whelen, A., et al., 1996, "The Role of Nucleic Acid Amplification and Detection in the Clinical Microbiology Laboratory", <i>Annu. Rev. Microbiol.</i> , 50 :349-373
	97	Wu, D., et al., 1989, "The Ligation Amplification Reaction (LAR) - Amplification of Specific DNA Sequences Using Sequential Rounds of Template-Dependent Ligation", <i>Genomics</i> , 4 :560-569
	98	Yoto, Y., et al., 1996, "Human parvovirus B19 infection associated with acute hepatitis", <i>The Lancet</i> , 347 :868-870
EXAMINER		/David Thomas/
DATE CONSIDERED		11/03/2011
*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		